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09/386,506	08/31/1999	ELIE-JEAN RAAD	16337.380	1474

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EXAMINER

HANNETT, JAMES M

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 09/11/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/386,506

Applicant(s)

RAAD, ELIE-JEAN

Examiner

James M Hannett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-9, and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-6, 8, 9, 13 and 15 is/are rejected.
- 7) ☒ Claim(s) 7 and 14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 18 June 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Response to Arguments

Applicant's arguments filed 7/16/2003 have been fully considered but they are not persuasive.

The applicant has argued that the combination of Weng in view of Tanaka does not teach the subject matter in newly amended Claims 1 and 9 and all or their depending claims. The examiner notes that newly amended Claim 1 includes the limitations as previously Claimed in Claim 3. Furthermore, Newly amended Claim 9 includes the limitations as previously Claimed in Claim 12. It is acknowledged by the examiner that the limitations of previous Claims 3 and 12 are not taught by the combination of Weng in view of Tanaka. However, as noted in the previous office action these limitations are taught by the combination of Weng in view of Tanaka in Further view of Palmer. The response does not address the Weng in view of Tanaka in view of Palmer rejection, nor does it mention Palmer at all. Therefore, the arguments are unpersuasive.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1: Claims 1, 4, 5, 6, 9, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,011,661 Weng in view of USPN 4,104,649 Tanaka et al in further view of USPN 5,455,711 Palmer.

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2: As for Claim 1, Weng depicts in Figure 1 a quick change lens mount for connecting a lens assembly to a camera board, Column 2, Lines 42-45; the camera board is viewed as the circuit board. The camera board having a image recording device (3), a filter (2) and a filter frame (14) to position the filter over the image recording device, The image recording device is viewed as the CCD (3) and the filter is viewed as the color filter (2), the filter frame is viewed as the color filter chamber (14). Comprising: A base (1) attached to the camera board having a quick connect coupling for removable coupling to the lens assembly; means for affixing the base Figure 2, filter and filter frame to the camera board. Column 2, Lines 17-34; The quick connect coupling is viewed as the threaded chamber (11) in that it allows for a quick connection of a lens assembly the base is viewed as the optical holder (1), the means for affixing the base is viewed as the screw holes depicted in Figure 2. Weng does not teach that the base has an interior opening and the quick connect coupling comprises a pair of slots to permit passage of a key affixed to an end of the lens assembly and a pair of keyways extending circumferentially from ends of corresponding ones of the slots, the slots and keyways dimensioned to receive keys of a lens assembly so as to lock the lens assembly to the base upon engagement of the keys of the lens assembly to respective keyways on the base.

Tanaka et al depicts in Figure 12 the use of a camera that has a base (30) that has an interior opening and the quick connect coupling comprises slots (29) to permit passage of a key (35) affixed to an end of the lens assembly and keyways (29) extending circumferentially from ends of corresponding ones of the slots, the slots and keyways dimensioned to receive keys of a lens assembly so as to lock the lens assembly to the base upon engagement of the keys of the lens assembly to respective keyways on the base. Tanaka depicts a lens assembly that is coupled

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to the camera base by inserting the lens assembly into the cylindrical opening of the base and rotating the lens assembly so that the lens assembly is locked to the base. Column 14, Lines 20-35 and Column 14, Lines 56-68; The camera base is viewed as the inputting device (30), the slots are viewed as the three arcuate recession points (29a-c), the keys and keyways are viewed as the arcuate projection pawls and the projection pawls. Tanaka is implemented by a used inserting the lens assembly into the slots on the base so that the extending Pawls or keys can enter the base. The lens assembly is then rotated so that the keys and the keyway will engage with each other and lock the lens assembly to the camera base. Tanaka teaches the use of three keys and keyways equally spaced from one another. It would have been obvious to replace the three keyways with a two keys spaced equally apart or for that matter four keys and keyways placed equally apart so as to engage with each other. This design of a base and lens assembly with keys and keyways is beneficial over a threaded connection because it allows for a faster replacement of a lens assembly.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the threaded portion of the base of Weng with the Base of Tanaka with keyways so that a lens assembly with keys can be connected to the base to allow for a faster replacement of a lens assembly.

Weng in view of Tanaka does not teach that the lens assembly has a removable adapter having a threaded interior opening to receive a threaded end of a lens housing and a base insert end, the base insert end having keys for engagement with the keyways. Weng teaches that the lens assembly has a base with threads to engage with threads on the base of the optical holder. Tanaka teaches that it is advantageous to have a base with keyways to engage keys on a lens

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assembly to allow for faster connection and disconnection of the lens assembly to the optical housing base.

Palmer teaches in Figure 1 and on Column 5, Lines 37-53 that it is advantageous to have a coupling adapter that has threads on one side that correspond to the threads of the base of a camera and threads of a different size that correspond to the threads of an optical lens assembly so as to allow for an unassociated lens assembly to be coupled to the optical housing. This adapter is designed to have connection means on one end that correspond to the type of connection means of the camera base, and connection means on the other end that correspond to the type of connector used on the end of a lens assembly. Palmer does not depict that the adaptor has keys to engage keyways on the optical housing because the optical housing has threaded fastening means as also taught by Weng.

Tanaka et al depicts in Figure 12 the use of a camera that has a base (30) that has an interior opening and the quick connect coupling comprises slots (29) to permit passage of a key (35) affixed to an end of the lens assembly and keyways (29) extending circumferentially from ends of corresponding ones of the slots, the slots and keyways dimensioned to receive keys of a lens assembly so as to lock the lens assembly to the base upon engagement of the keys of the lens assembly to respective keyways on the base. Tanaka depicts a lens assembly that is coupled to the camera base by inserting the lens assembly into the cylindrical opening of the base and rotating the lens assembly so that the lens assembly is locked to the base. Column 14, Lines 20-35 and Column 14, Lines 56-68; The camera base is viewed as the inputting device (30), the slots are viewed as the three arcuate recession points (29a-c), the keys and keyways are viewed as the arcuate projection pawls and the projection pawls. Tanaka is implemented by a used

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inserting the lens assembly into the slots on the base so that the extending Pawls or keys can enter the base. The lens assembly is then rotated so that the keys and the keyway will engage with each other and lock the lens assembly to the camera base. This design of a base and lens assembly with keys and keyways is beneficial over a threaded connection because it allows for a faster replacement of a lens assembly.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the base of Weng to include the keyways as taught by Tanaka et al in order to allow for a faster replacement of a lens assembly. It would have been further obvious to include and modify the adapter of Palmer to have Keys to engage the keyways of the invention of Weng in view of Tanaka et al so as to allow for an unassociated lens assembly to be coupled to the optical housing.

3: In regards to Claim 4, Weng in view of Tanaka et al in further view of Palmer teaches the claimed invention as discussed in Claim 1.

Tanaka et al further depicts a lens assembly that is coupled to the camera base by inserting the lens assembly into the cylindrical opening of the base and rotating the lens assembly so that the lens assembly is locked to the base. Column 14, Lines 20-35 and Column 14, Lines 56-68; Tanaka depicts in Figure 12 a lens assembly (LE) that has a cylindrical surface with three keys affixed thereto equally spaced from each other on the cylindrical surface.

Tanaka does not teach that there should only be two keys or four keys. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the three keys with any number of keys including two keys and have them equally spaced from each other along the cylindrical surface. This design of a base and lens assembly with keys

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and keyways is beneficial over a threaded connection because it allows for a faster replacement of a lens assembly. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the threaded portion of the base of Weng with the Base of Tanaka with keyways so that a lens assembly with keys can be connected to the base to allow for a faster replacement of a lens assembly

4: As for Claim 5, Weng further teaches in Figure 2 and on Column 1, Lines 40-50 the use of means for affixing is a pair of screws passing through holes in the camera board and filter frame and engaging threaded holes in the base.

5: As for Claim 9, Weng depicts in Figure 1 and teaches on Column 2, Lines 42-45 and Column 1, Lines 40-50 a method of mounting a lens assembly to a camera board, comprising:

Forming a base (1) to fit over and lock to an end of the lens assembly; mounting the base over an image recording device (3) and affixed to the camera board; inserting and locking the lens assembly to the base. The base is viewed as the optical holder, the base locks to the lens assembly by means of the threads (11) and the locating hole (18), which locks the lens assembly in place, and the camera board is viewed as the circuit board.

Weng does not teach that the base can have a cylindrical opening with slots and keyways on an interior surface thereof, which slidably receives and engage keys on an end of the lens housing.

Tanaka et al depicts in Figure 12 the use of a camera that has a base (30) that has an interior opening and the quick connect coupling comprises slots (29) to permit passage of a key (35) affixed to an end of the lens assembly and keyways (29) extending circumferentially from ends of corresponding ones of the slots, the slots and keyways dimensioned to receive keys of a lens assembly so as to lock the lens assembly to the base upon engagement of the keys of the

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lens assembly to respective keyways on the base. Tanaka depicts a lens assembly that is coupled to the camera base by inserting the lens assembly into the cylindrical opening of the base and rotating the lens assembly so that the lens assembly is locked to the base. Column 14, Lines 20-35 and Column 14, Lines 56-68; The camera base is viewed as the inputting device (30), the slots are viewed as the three arcuate recession points (29a-c), the keys and keyways are viewed as the arcuate projection pawls and the projection pawls. Tanaka is implemented by a used inserting the lens assembly into the slots on the base so that the extending Pawls or keys can enter the base. The lens assembly is then rotated so that the keys and the keyway will engage with each other and lock the lens assembly to the camera base. This design of a base and lens assembly with keys and keyways is beneficial over a threaded connection because it allows for a faster replacement of a lens assembly.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the threaded portion of the base of Weng with the Base of Tanaka with keyways so that a lens assembly with keys can be connected to the base to allow for a faster replacement of a lens assembly.

Weng in view of Tanaka does not teach that the lens assembly has a removable adapter having a threaded interior opening to receive a threaded end of a lens housing and a base insert end, the base insert end having keys for engagement with the keyways. Weng teaches that the lens assembly has a base with threads to engage with threads on the base of the optical holder. Tanaka teaches that it is advantageous to have a base with keyways to engage keys on a lens assembly to allow for faster connection and disconnection of the lens assembly to the optical housing base.

Palmer teaches in Figure 1 and on Column 5, Lines 37-53 that it is advantageous to have a coupling adapter that has threads on one side that correspond to the threads of the base of a camera and threads of a different size that correspond to the threads of an optical lens assembly so as to allow for an unassociated lens assembly to be coupled to the optical housing. This adapter is designed to have connection means on one end that correspond to the type of connection means of the camera base, and connection means on the other end that correspond to the type of connector used on the end of a lens assembly. Palmer does not depict that the adaptor has keys to engage keyways on the optical housing because the optical housing has threaded fastening means as also taught by Weng.

Tanaka et al depicts in Figure 12 the use of a camera that has a base (30) that has an interior opening and the quick connect coupling comprises slots (29) to permit passage of a key (35) affixed to an end of the lens assembly and keyways (29) extending circumferentially from ends of corresponding ones of the slots, the slots and keyways dimensioned to receive keys of a lens assembly so as to lock the lens assembly to the base upon engagement of the keys of the lens assembly to respective keyways on the base. Tanaka depicts a lens assembly that is coupled to the camera base by inserting the lens assembly into the cylindrical opening of the base and rotating the lens assembly so that the lens assembly is locked to the base. Column 14, Lines 20-35 and Column 14, Lines 56-68; The camera base is viewed as the inputting device (30), the slots are viewed as the three arcuate recession points (29a-c), the keys and keyways are viewed as the arcuate projection pawls and the projection pawls. Tanaka is implemented by a used inserting the lens assembly into the slots on the base so that the extending Pawls or keys can enter the base. The lens assembly is then rotated so that the keys and the keyway will engage

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with each other and lock the lens assembly to the camera base. This design of a base and lens assembly with keys and keyways is beneficial over a threaded connection because it allows for a faster replacement of a lens assembly.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the base of Weng to include the keyways as taught by Tanaka et al in order to allow for a faster replacement of a lens assembly. It would have been further obvious to include and modify the adapter of Palmer to have Keys to engage the keyways of the invention of Weng in view of Tanaka et al so as to allow for an unassociated lens assembly to be coupled to the optical housing.

Weng does not teach the use of a lens assembly includes a separate adapter removable connected to an end of a lens housing and capable of being inserted and locked to the base.

Palmer teaches in Figure 1 and on Column 5, Lines 37-53 that it is advantageous to have a coupling adapter that has threads on one side that correspond to the threads of the base of a camera and threads of a different size that correspond to the threads of an optical lens assembly so as to allow for an unassociated lens assembly to be coupled to the optical housing. This adapter is designed to have connection means on one end that correspond to the type of connection means of the camera base, and connection means on the other end that correspond to the type of connector used on the end of a lens assembly.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the adapter of Palmer to so as to allow for an unassociated lens assembly to be coupled to the optical housing.

6: In regards to Claim 6, Official notice is taken that it was commonly know in the art at the time the invention was made to make the filter and camera housings out of a resilient material so as to shield the filter from impact.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the filter and camera housings out of a resilient material so as to shield the filter from impact.

7: As for Claim 13, Official notice is taken that it was commonly know in the art at the time the invention was made to make the filter and camera housings out of a resilient material so as to shield the filter from impact.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the filter and camera housings out of a resilient material so as to shield the filter from impact.

8: Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,011,661 Weng in view of USPN 4,104,649 Tanaka et al in further view of USPN 5,455,711 Palmer in view of JP-10073864 Nemoto.

9: In regards to Claim 8, Weng in view of Tanaka et al in further view of Palmer teaches the claimed invention as discussed above in Claim 6. Weng in view of Tanaka et al in further view of Palmer does not teach that the filter housing is made of an elastomeric material.

Nemoto teaches in Paragraphs [0023 and 0023] of the translation that it is advantageous to manufacture a lens mount out of an elastic material to facilitate the assembly of a CCD camera by allowing for the easy insertion of a filter assembly and further to make the lens mount fixable. The elastic material is viewed as the elastomeric material.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to manufacture the optical housing of Weng with the elastic material of Nemoto in order to allow for the easy insertion of a filter assembly and further to make the lens mount fixable.

10: As for Claim 15, Weng in view of Tanaka et al in further view of Palmer teaches the claimed invention as discussed above in Claim 6. Weng in view of Tanaka et al in further view of Palmer does not teach that the filter housing is made of an elastomeric material.

Nemoto teaches in Paragraphs [0023 and 0023] of the translation that it is advantageous to manufacture a lens mount out of an elastic material to facilitate the assembly of a CCD camera by allowing for the easy insertion of a filter assembly and further to make the lens mount fixable. The elastic material is viewed as the elastomeric material.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to manufacture the optical housing of Weng with the elastic material of Nemoto in order to allow for the easy insertion of a filter assembly and further to make the lens mount fixable.

Allowable Subject Matter

11: Claims 7 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hannett whose telephone number is 703-305-7880. The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 703-305-4929. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-842-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is 703-308-6789.

James Hannett
Examiner
Art Unit 2612

JMH
September 8, 2003


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
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